DRAFT

Permit No. **VA0052451**

Effective Date: **2007** Expiration Date: **2012**

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I – Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner Name: Virginia Electric & Power Company
Facility Name: Dominion – North Anna Power Station

County: Louisa

Facility Location: 1022 Haley Drive (near Mineral, VA)

The owner is authorized to discharge to the following receiving stream:

Stream Name: Lake Anna

River Basin: York
River Subbasin: NA

Section: 03

Class: III

Special Standards: None

Jeffery A. Steers
Director, Northern Regional Office
Department of Environmental Quality

Date

1. Outfall 001 (Discharge from Waste Heat Treatment Facility at Dike 3)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples and measurements shall be taken at Dike 3 before subsurface discharge to the lake.

PARAMETER	D	ISCHAR GE LIMITA	TIONS		MONITORING REQUIREMENTS			EQUIREMENTS
	Monthly Average	Daily Maximum	Minimum	<u>Maximum</u>	Frequer	<u>1cy</u>		Sample Type
рН	N/A	N/A	6.0 S.U.	9.0 S.U.	1/W			Grab
Flow (MGD)	NL	N/A	N/A	NL	1/W			Estimate
Total Residual Chlorine ⁽¹⁾	0.011 mg/L	0.011 mg/L	N/A	N/A	1/ M			Grab
Temperature (°C)	NL	NL	N/A	N/A	1/W			IS
Chronic 3-Brood Static Renewal C. dubia ⁽²⁾	N/A	N/A	N/A	NL	1/Y			Grab
Chronic 7-Day Static Renewal P. promelas ⁽²⁾	N/A	N/A	N/A	NL	1/Y			Grab
(1) Please see Part I.B. for additional monitor	ring instructions.		MGD = 1	Million gallons pe	er day.	1/ M	=	Once every month.
(2) See Part I.C.			NA = 1	Not applicable		1/W	=	Once every week.
			NL = 1	No limit; monitor	and report	1/Y	=	Once per year.
			S.U. = 3	Standard units.		IS	=	Immersion and Stabilization

2. Outfall 009 (Ground Water, Storm Water, and Backwash from Sand Filters and Reverse Osmosis Units)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 009. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples shall be taken at the discharge to the lake.

PARAMETER		DISCHARGE LIMI	TATIONS		MONITORING	REQUIREMENTS		
	Monthly Average(1)	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	<u>Frequency</u>	Sample Type		
Flow (MGD)	NL	N/A	N/A	NL	2/M	Estimate		
pН	N/A	N/A	6.0 S.U.	9.0 S.U.	2/M	Grab		
Total Suspended Solids	30 mg/L	100 mg/L	N/A	N/A	$1/3M^{(2)}$	Grab		
(2) The quarterly m April 1 – June 3 December 31. T day of the month	See Part I.B. for additional monitoring and reporting instructions. The quarterly monitoring periods shall be January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31. The DMR shall be submitted no later than the 10 th day of the month following the monitoring period (April 10, July 10, October 10 and January 10, respectively).			Million gallons per day Not applicable. No limit; monitor and report.	ce every month. e every 3 months.			
			S.U. =	Standard units.				
	Grab = An individual sample collected over a period of time not to exceed 15-minutes							

3. Outfall 013 (Turbine Building Sump #1 & #2 and Storm Water)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 013. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples shall be collected during non-storm events.

PARAMETER	I	DISCHARGE LIMITA		MONITORING REQUIREMENT		
	Monthly Average ⁽¹⁾	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	<u>Frequency</u>	Sample Type
Flow (MGD)	NL	N/A	N/A	NL	1/ M	Estimate
pH	N/A	N/A	6.0 S.U.	9.0 S.U.	1/ M	Grab
Total Suspended Solids	30 mg/L	100 mg/L	N/A	N/A	1/ M	Grab
Oil and Grease	15 mg/L	20 mg/L	N/A	N/A	1/ M	Grab

(1) See Part I.B. for additional monitoring and reporting instructions.

 $MGD \quad = \ Million \ gallons \ per \ day.$

1/M = Once every month.

NA = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

4. Outfall 016 (Intake Screen Wash Water)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 016. Such discharges shall be limited and monitored by the permittee as specified below.

	PARAMETER	Monthly Average ⁽¹⁾	DISCHARGE LIMIT <u>Daily Maximum</u> (1)	Maximum ⁽¹⁾	MONITORI Frequency	ING REQUIREMENTS <u>Sample Type</u>	
Flow	(MGD)	NL	N/A	N/A	NL	1/Y ⁽²⁾	Estimate
(1) (2)	See Part 1.B. for additional monitoring and reporting instructions.		o later than the	MGD = Million NA = Not ap	n gallons per day. plicable.	1/Y =	Once every year.
	•			NL = No lim	nit; monitor and repo	rt.	

5. Outfall 020 (Reverse Osmosis Reject)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 020. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples shall be taken before subsurface discharge to the lake.

PARAMETER		DISCHARGE LIMI	TATIONS		MONITORING	REQUIREMENTS
	Monthly Average ⁽¹⁾	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	<u>Frequency</u>	Sample Type
Flow (MGD)	NL	N/A	N/A	NL	2/M	Estimate
pН	N/A	N/A	6.0 S.U.	9.0 S.U.	2/M	Grab
Total Suspended Solids	30 mg/L	100 mg/L	N/A	N/A	$1/3M^{(2)}$	Grab
Total Residual Chlorine ⁽¹⁾	NL	4.0 mg/L	N/A	N/A	2/M	Grab
The quarterly monitor April 1 – June 30, June 30. The I day of the month fol	(1) See Part I.B. for additional monitoring and reporting instructions.		MGD = Million gallons per day. NA = Not applicable. NL = No limit; monitor and report.		1/3M =	Twice every month. Once every 3 months.
			S.U. = Standa	ard units.		

6. Outfall 021 (Reverse Osmosis Drain Line)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 021. Such discharges shall be limited and monitored by the permittee as specified below.

PARAMETER	D	ISCHARGE LIMITAT	TIONS		MONITORI	NG REQUIREMENTS
	Monthly Average(1)	Daily Maximum ⁽¹⁾	Minimum	Maximum ⁽¹⁾	Frequency	Sample Type
Flow (MGD)	NL	N/A	N/A	NL	1/ M	Estimate
See Part I.B. for addition	nal monitoring and reporting	g instructions. MO	GD = Mi	illion gallons per day	r. 1/M	= Once every month.
]	NA = No	ot applicable.		
			NL = Nc	limit; monitor and i	report.	

7. Storm Event Monitoring (Outfalls 014, 022, 023, 024, 025, and 026)

- a. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfalls 014, 022, 023, 024, 025, and 026. Such discharges shall be monitored and managed in accordance with Part I. F.
- b. There shall be no discharge of process wastewater from these outfalls.
- c. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- d. Outfall 014 corresponds to Drainage Area 31 in the permit application.
- e. Outfall 022 corresponds to Drainage Area 2A in the permit application.
- f. Outfall 023 corresponds to Drainage Area 2B in the permit application.
- g. Outfall 024 corresponds to Drainage Area 3 in the permit application.
- h. Outfall 025 corresponds to Drainage Area 18 in the permit application.
- i. Outfall 026 corresponds to Drainage Area 25 in the permit application.

8. Outfall 101 (Discharge of Condenser Cooling Water to Discharge Canal)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 101. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Measurements shall be taken at the discharge canal prior to entering the WHTF.

PARAMETER	D	ISCHARGE LIMITAT	ΓIONS		MONITOR	RING REQUIREMENTS
	Monthly Average	Daily Maximum	<u>Minimum</u>	<u>Maximum</u>	Frequency	Sample Type
Flow (MGD) (1)	NL	N/A	N/A	NL	1/D	Calculated and Recorded
Heat Rejected (10 ⁹ BTU/Hr) ⁽²⁾⁽³⁾	N/A	N/A	N/A	13.54	1/D	Calculated
Temperature at Inlet Waterbox (°F)	NL	NL	N/A	N/A	1/D	Recorded
Temperature at Outlet Waterbox (°F)	NL	NL	N/A	N/A	1/D	Recorded
(1) The value reported as the daily maximum flow for the report period shall be the intake flow rate which occurred on the day that the maximum heat rejected was calculated from Units 1 and/or 2.				Million gallons pe	er day.	/D = Once every day.

- Heat rejected rate submitted monthly shall be a calculation of the maximum heat directed to the (2) waste heat treatment facility from Units 1 and/or 2. Calculations are to be included with the monthly DMR.
- See Part I.B. for additional monitoring and reporting instructions. (3)

NA = Not applicable.

NL = No limit; monitor and report

S.U. = Standard units.

9. Outfall 103 (Process Waste Clarifier)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 103. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples except for pH, shall be taken at the clarifier building from the sample tap before the pipe discharges to the tunnel. pH shall be monitored in the cooling water discharge canal prior to discharge into the waste heat treatment facility.

PARAMETER	D	ISCHARGE LIMITATIO	NS		MONITORIN	G REQUIREMENTS		
	Monthly Average (1)	<u>Daily Maximum</u> ⁽¹⁾ <u>Minimum</u> <u>Maximum</u> ⁽¹⁾		Frequency ⁽²⁾	Sample Type			
Flow (MGD)	NL	N/A	N/A	NL	1/ Y	Estimate		
pH	N/A	N/A	6.0 S.U.	9.0 S.U.	1/ Y	Grab		
Total Suspended Solids	30 mg/L	100 mg/L	N/A	N/A	1/ Y	Grab		
Oil and Grease	15 mg/L	20 mg/L	N/A	N/A	1/ Y	Grab		
						= Once every year.		
For annual reporting, DMR shall be submitted no later than the $NA = Not$ applicable.								

For annual reporting, DMR shall be submitted no later than the 10th day of January following the monitoring period.

NL = No limit; monitor and report.

S.U. = Standard units.

10. Outfall 104 (Oil/Water Separator and Storm Water)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 104. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples, except for pH, shall be taken prior to mixing with storm water. pH shall be monitored in the cooling water discharge canal prior to discharge into the waste heat treatment facility.

PARAMETER	Γ	DISCHARGE LIMITA	TIONS		MONITORING	G REQUIREMENTS	
	Monthly Average(1)	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	Frequency ⁽²⁾	Sample Type	
Flow (MGD)	NL	N/A	N/A	NL	1/Y	Estimate	
pН	N/A	N/A	6.0 S.U.	9.0 S.U.	1/Y	Grab	
Total Suspended Solids	30 mg/L	100 mg/L	N/A	N/A	1/Y	Grab	
Oil and Grease	15 mg/L	20 mg/L	N/A	N/A	1/Y	Grab	
(1) See Part I.B. for a	dditional monitoring and re	eporting instructions.	MGD = M	lillion gallons per d	lay. 1/Y	= Once every year.	
	ing, DMR shall be submitte		NA = Not applicable.				
10 th day of January following the monitoring period.			NL = No limit; monitor and report.				
	S.U. = Standard units.						

11. Outfall 105 (Bearing Cooling Tower Blowdown)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 105. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples, except for pH, shall be taken at the sample tap before entering the tunnel at the turbine building basement. pH shall be monitored in the cooling water discharge canal prior to discharge into the waste heat treatment facility.
- d. Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than 2 hours in any one day, and not more than one unit in any plant may discharge free available or total residual chlorine at any one time from outfall 105.
- e. The 126 priority pollutants (as shown in Appendix A) shall be non-detectable in the cooling tower blowdown discharge from outfall 105. The monitoring requirement may be substituted by submitting engineering calculations which demonstrate that the regulated pollutants are not detectable, in the final discharge by the analytical methods in 40 CFR Part 136.

PARAMETER	DISCI	HARGE LIMITATIO	NS		MONITORING REQUIREMENTS		
	Monthly Average ⁽¹⁾	Daily Maximum ⁽¹⁾	Minimum	Maximum ⁽¹⁾	Frequency	Sample Type	
Flow (MGD)	NL	N/A	N/A	NL	1/ M	Estimate	
pН	N/A	N/A	6.0 S.U.	9.0 S.U.	1/ M	Grab	
Free Available Chlorine ⁽¹⁾	0.2 mg/L	0.5 mg/L	N/A	N/A	1/ M	Grab	
The 126 Priority Pollutants (Appendix A) contained in chemicals added for cooling tower maintenance except Total Chromium and Total Zinc	ND	ND	N/A	N/A	1/3M ⁽²⁾	Grab	
Total Chromium ⁽¹⁾	0.2 mg/L	0.2 mg/L	N/A	N/A	$1/3M^{(2)}$	Grab	
Total Zinc ⁽¹⁾	1.0 mg/L	1.0 mg/L	N/A	N/A	$1/3M^{(2)}$	Grab	
(1) See Part I.B. for additional monito The quarterly monitoring periods of April 1 – June 30, July 1 – Septem December 31. The DMR shall be day of the month following the month followi	NA = Not ap NL = No lim ND = No det	it; monitor and ectable amoun ls in 40 CFR P	1/3M	Once every month.Once every 3 months.			

12. Outfall 107 (Bearing Cooling System Discharge – Lake to Lake Operation)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 107. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples shall be taken before entering the tunnel at the turbine building basement.

PARAMETER	DISC	HARGE LIMITATIO	NS		MONITORING REQUIREMENTS		
	Monthly Average ⁽¹⁾	Daily Maximum ⁽¹⁾ Min		Maximum ⁽¹	Frequency ⁽²⁾	Sample Type	
Flow (MGD)	NL	N/A	N/A	NL	1/ Y	Estimate	
Total Residual Chlorine (1) NL		4.0mg/L	N/A	N/A	1/ Y	Grab	
	nonitoring and reporting instruction shall be submitted no later than the monitoring period.	10^{th} NA = NL =	 Million ga Not applic No limit; r dual sample co 	able. nonitor and re	eport.	Once every year.	

13. Outfall 108 (Service Water Overflow)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 108. Such discharges shall be limited and monitored by the permittee as specified below.
- c. The sample, except for pH, shall be taken at tap before entering the tunnel. pH shall be monitored in the cooling water discharge canal prior to discharge into the waste heat treatment facility

	PARAMETER	D	ISCHARGE LIMITAT	IONS		MONITORING REQUIREMENTS		
		Monthly Average (1)	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	Frequency ⁽²⁾	Sample Type	
Flow (M	GD)	NL	N/A	N/A	NL	$1/\mathbf{Y}$	Estimate	
pН		N/A	N/A	6.0 S.U.	9.0 S.U.	1/Y	Grab	
(1)	For annual reporting, D	nal monitoring and reporting i MR shall be submitted no later g the monitoring period.	than the 10 th	NA = Not $NL = No$ $S.U. = Stan$	lion gallons per d t applicable. limit; monitor and ndard units. sample collected o	d report.	1/M = Once every month. 1/Y = Once every year. time not to exceed 15-minutes.	

14. Outfall 109 & 110 (Hot Well Drains 1&2)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 109 & 110. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples except for pH, shall be taken before discharge to the tunnel. pH shall be monitored in the cooling water discharge canal prior to discharge into the waste heat treatment facility.

PARAMETER	I	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average ⁽¹⁾	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	Frequency ⁽²⁾	Sample Type	
Flow (MGD)	NL	N/A	N/A	NL	1/Y	Estimate	
pH	N/A	N/A	6.0 S.U.	9.0 S.U.	1/Y	Grab	
Total Suspended Solids	30 mg/L	100 mg/L	N/A	N/A	1/Y	Grab	
Oil and Grease	15 mg/L	20 mg/L	N/A	N/A	1/Y	Grab	
(1) See Part I.B. for addition	onal monitoring and reporting inst	ructions. MGI	O = Million g	allons per day.	1/Y =	Once every year.	
	OMR shall be submitted no later th	an the 10 th NA	A = Not appli	cable.			
day of January followi	NI	NL = No limit; monitor and report.					
		S.U	J. = Standard	units.			
		Grab = An	individual samp	ole collected over a	a period of time not	to exceed 15-minutes.	

15. Outfall 111 (Sewage)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 111. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples shall be taken at the effluent V-notch weir, before subsurface discharge.

PARAMETER		DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	Monthly .	Average ⁽¹⁾	Daily Max	ximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	<u>Frequency</u>	Sample Type
Flow (MGD) (2)	N	L	N/A	A	N/A	NL	1/D	Estimate
ьН	N	/A	N/A	A	6.0 S.U.	9.0 S.U.	1/ M	Grab
BOD_5	30 mg/L	3.4 kg/d	45 mg/L	5.1 kg/d	N/A	N/A	1/6M	Grab
Total Suspended Solids	30 mg/L	3.4 kg/d	45 mg/L	5.1 kg/d	N/A	N/A	$1/3M^{(3)}$	Grab
Total Residual Chlorine (TRC) (1)	2 0 r	ng/L	2.4 m	g/L	N/A	N/A	1/D	Grab
rotai Residuai Ciliornie (TRC)	2.0 1	iig/L		-6 -				
(1) See Part I.B. for disinfection	on requirements		MG		Million gallons p		1/D = C	Once every day.
(1) See Part I.B. for disinfection reporting and monitoring in The design flow of this treation.	on requirements a	and additional		D =	Million gallons p			Once every day. Once every month.
See Part I.B. for disinfection reporting and monitoring in	on requirements and requirements and requirements at ment facility is periods shall be J	and additional 0.030 MGD. anuary1 – March	MG N n N	D = A =	0 1	oer day.	1/M = C	

16. Outfall 112 & 113 (Steam Generator Blowdown Units 1&2)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 112 & 113. Such discharges shall be limited and monitored by the permittee as specified below.
- c. Samples except for pH, shall be taken at the sample tap before entering the tunnel in the turbine building basement (Unit 1 side for 112 and Unit 2 side for 113). pH shall be monitored in the cooling water discharge canal prior to discharge into the waste heat treatment facility.

PARAMETER	I	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	Monthly Average(1)	Daily Max	imum ⁽¹⁾]	<u>Minimum</u>	Maximum ⁽¹⁾	Frequency ⁽²⁾	Sample Type
Flow (MGD)	NL	N/A	Λ		N/A	NL	1/Y	Estimate
pН	N/A	N/A	Λ		6.0 S.U.	9.0 S.U.	1/Y	Grab
Total Suspended Solids	30 mg/L	100 m	g/L		N/A	N/A	1/ Y	Grab
Oil and Grease	15 mg/L	20 mg	g/L		N/A	N/A	1/Y	Grab
	nal monitoring and reporting instruc		MGD	=	Million gall	lons per day.	1/Y = C	Once every year.
	MR shall be submitted no later than	the 10 th day	NA	=	Not applica			
of January following the	e monitoring period.		NL	=	No limit; m	onitor and report.	•	
			S.U.	=	Standard un	nits.		
			Grab = Ar	ind	lividual samp	ole collected over	a period of time not	to exceed 15-minutes

17. Outfall 114 (Service Water Pipe Vault Drain)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 114. Such discharges shall be limited and monitored by the permittee as specified below.

PARAMETER	DISCI	MONITORING REQUIREMENTS				
TANAMETER	Monthly Average ⁽¹⁾	Monthly Average ⁽¹⁾ Daily Maximum ⁽¹⁾ Minim		Maximum ⁽¹⁾	Frequency ⁽²⁾	Sample Type
Flow (MGD)	NL	N/A	N/A	NL	1/Y	Estimate
-	onitoring and reporting instruction all be submitted no later than the monitoring period.		Million gallo Not applicab No limit; mo	<u> </u>	1/Y =	Once every year.

18. Outfall 115 (Service Water System Blowdown)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall 115. Such discharges shall be limited and monitored by the permittee as specified below.

PARAMETER	Ι	DISCHARGE LIMITATI		MONITORIN	IG REQUIREMENTS	
	Monthly Average(1)	Daily Maximum ⁽¹⁾	<u>Minimum</u>	Maximum ⁽¹⁾	Frequency ⁽²⁾	Sample Type
Flow (MGD)	NL	N/A	N/A	NL	1/Y	Estimate
	monitoring and reporting instructions and reporting instructions. R shall be submitted no later than the monitoring period.		= Not applic	llons per day. cable. monitor and repor	1/Y =	Once every year.

B. Additional Effluent Limitations, Monitoring Requirements, Quantification Levels and Compliance Reporting

- 1. Additional Disinfection Limitations and Monitoring Requirements (Outfall 111)
 - a. The permitee shall monitor the TRC at the outlet of the chlorine contact tank once per day by grab sample.
 - b. No more than 3 of the total number of monthly samples taken at the outlet of the chlorine contact tank shall be less than 1.0 mg/l for any one calendar month.
 - c. No TRC sample collected at the outlet of the chlorine contact tank shall be less than 0.6 mg/l.
 - d. If chlorine disinfection is not used, *E. coli* shall be limited and monitored by the permittee as specified below:

	Discharge Limitations	<u>Monitoring</u>	
	Monthly Average	Frequency Requirements	Sample Type
E. coli	126 n/100ml	1/W	Grab
	Geometric Mean		Between 10 AM & 4 PM

This *E. coli* requirement, if applicable, shall substitute for the TRC requirements delineated elsewhere in Part I.

2. Quantification Levels

a. Maximum quantification levels (QLs) shall be as follows:

Characteristic	Quantification Level
Chlorine	0.10 mg/L
Total Chromium	0.2 mg/L
Total Zinc	1.0 mg/L

- b. The permittee may use any approved method, which has a QL equal to or lower than the QL listed in B.2.a. above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.
- c. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained.
 - d. An appropriate analytical method for metals shall be selected from the following list of EPA methods, or any approved method in 40 CFR Part 136, which will achieve a QL that is less than or equal to the QL specified in B.2.a. above.

Metal	Analytical Methods
Chromium*	1639
Zinc	1638; 1639

* Chromium III is measured by the total chromium analysis. If the result of the total chromium analysis is less than or equal to the QL (or specific target value), the result for chromium III can be reported as less than QL.

3. Compliance Reporting for Parameters in Part I.A.

- a. Monthly Average Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.A shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as <QL. If reporting for quantity is required on the DMR and the calculated concentration is <QL then report <QL for the quantity, otherwise use the calculated concentration to determine the monthly average quantity.
- b. Daily Maximum Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.A shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL then the average shall be reported as <QL. If reporting for quantity is required on the DMR and the calculated concentration is <QL then report <QL for the quantity otherwise use the calculated concentration to determine the quantity.
- c. Any single datum required shall be reported as <QL if it is less than the QL in a. above. Otherwise the numerical value shall be reported.
- d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same.
- e. Heat Rejection Heat rejected rate submitted monthly shall be a calculation of the maximum heat directed to the waste heat treatment facility from Units 1 and/or 2. The following calculation shall be used to determine heat rejection:

$$Q = \frac{C_p m(?T)}{24 \text{ hr}}$$

Where Q = Heat Rejection, BTU/Hour

 C_p = Heat Capacity (Specific Heat) of pure water

= 1.0 BTU/pound °F

m = Mass of Water

= flow rate (MGD) x specific gravity of pure water

= flow rate (MGD) x 8.34 pounds/gallon

?T = Temperature at outlet waterbox – temperature of intake waterbox, °F

C. Toxics Monitoring Program Requirements (Outfall 001)

1. Biological Monitoring for Outfall 001

a. In accordance with the schedule in 1.e. below, the permittee shall conduct annual chronic toxicity tests.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia* Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units) for DMR reporting where $TU_c = 100/NOEC$. Report the LC_{50} at 48 hours and the IC_{25} with the NOEC's in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR Part 136.3.

b. The test dilutions shall bracket and include the following endpoints:

Chronic NOEC of 100% equivalent to a TU_c of 1.0.

- c. Should evaluation of the data indicate that a limit is needed, the permit may be modified to include a WET limit or similar condition to control toxicity.
- d. Should the permittee conduct toxicity testing of the effluent prior to the compliance date listed in the schedule below, the results of the test and the test report shall be reported with the DMR for the month following the receipt of the testing results. In no case shall this exceed 45 days from the completion of the test.

e. Reporting Schedule:

The permittee shall report the results on the DMR and supply two (2) copies of the toxicity test reports specified in this Toxics Management Program in accordance with the following schedule:

<u>Period</u>	Compliance Period	DMR/Report Submission Dates
Annual 1	March 2008	4/10/08
Annual 2	March 2009	4/10/09
Annual 3	March 2010	4/10/10
Annual 4	March 2011	4/10/11
Annual 5	March 2012	4/10/12

2. Water Quality Criteria Monitoring (Outfall 001)

The permittee shall monitor the effluent at Outfall 001 for the substances noted in Appendix B, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be conducted annually and reported in accordance with the schedule in 1.e. above using Appendix B as the reporting form. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.

3. Water Quality Criteria Reopener

Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

D. Flow Releases and Lake Level Management

- 1. Except as provided in 2, below, the permittee shall at all times provide a minimum release from Lake Anna of 40cfs.
- 2. When the level in Lake Anna reaches 248 feet above mean sea level (msl), the permittee will begin reducing releases below the 40cfs minimum in accordance with the following conditions:
 - a. Minimum releases shall not drop below 20cfs.
 - b. The DEQ's Northern Regional Office and the downstream users identified below will be given at least 72 hours notice by the permittee prior to the initiation of flow reductions:
 - Hanover County Public Utilities
 - Bear Island Paper Company
 - Engel Farms, Inc.
 - Pamunkey Indian Tribal Government
 - Virginia Department of Game and Inland Fisheries
 - c. Skimmer gate adjustments will be performed in accordance with Dominion's Station Operating Procedures.
 - d. Releases shall be stepped down in increments of approximately 5cfs with at least a 72-hour period following each incremental reduction and prior to any subsequent reduction.
 - e. During the period in which releases are reduced below 40cfs, conditions in the North Anna River shall be monitored in accordance with the monitoring plan submitted by the permittee and approved by the DEQ prior to implementation of the Lake Level Contingency Plan.
 - f. Releases from the dam shall return to 40cfs upon the lake level returning to greater than 248 ft. msl. Increases of flow will occur in 5cfs increments with a 24 hour wait period prior to the next gate adjustment.
 - g. If any downstream user identifies an adverse effect at any time during flow reductions and notifies the DEQ of the adverse effect, DEQ shall make a timely investigation. If after notice to the permittee and the affected downstream users, DEQ finds an adverse effect from the flow reductions, the flows shall be increased in 5cfs increments with a 24 hour wait period prior to the

next gate adjustment, until the flow reaches 40cfs or DEQ finds that the adverse effect has been eliminated.

- h. Adverse effect is defined as the inability to withdraw/discharge water for proper operation of facilities, or impairment of water quality.
- 3. The permittee shall install and begin operation of a gauging station on the North Anna River downstream of the dam, but no further than the Route 658 Bridge, by September 30, 2008. Plans for the station shall be submitted to DEQ for approval. The gauge placement, construction, and operation shall be of sufficient quality that the flow data are acceptable to be published by the US Geological Survey.

E. Other Requirements and Special Conditions

1. Operation and Maintenance (O&M) Manual Requirement

The permittee shall review the existing Operations and Maintenance (O&M) Manual and notify the DEQ Northern Regional Office, in writing, whether it is still accurate and complete by December 31, 2007. If the O&M Manual is no longer accurate and complete, a revised O&M Manual shall be submitted for approval to the DEQ Northern Regional Office by December 31, 2007.

The permittee will maintain an accurate, approved O&M Manual for the treatment works. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Treatment system design, treatment system operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping;
- b. Techniques to be employed in the collection, preservation and analysis of effluent samples (and sludge samples if sludge analyses are required);
- c. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters;
- d. A plan for the management and/or disposal of waste solids and residues;
- e. Discussion of Best Management Practices, if applicable; and
- f. Procedures for measuring and recording the duration and volume of treated wastewater discharged.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O&M Manual shall be deemed a violation of the permit.

2. 95% Capacity Reopener (Outfall 111)

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Northern Regional Office when the monthly average effluent flow from the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Northern Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

3. <u>Indirect Dischargers (Outfall 111)</u>

The permittee shall provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.
- c. Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

4. Licensed Operator Requirement (Outfall 111)

The permittee shall employ or contract at least one Class IV licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

5. Reliability Class (Outfall 111)

The permitted treatment works shall meet Reliability Class II.

6. Sludge Use and Disposal (Outfall 111)

The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ and Department of Health approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

7. Sludge Reopener (Outfall 111)

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

8. CTC and CTO Requirements (Outfall 111)

The permittee, in accordance with the Sewage Collection and Treatment Regulations, shall obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) from the DEQ prior to constructing wastewater treatment facilities and operating the facilities respectively.

9. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

10. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter;
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant, which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter;
 - (2) One milligram per liter for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.

11. PCB Discharge

There shall be no discharge of polychlorinated biphenyl compounds, such as those commonly used for transformer fluids, to navigable waters that originate from this source in amounts equal to or greater than detected by EPA Test Methods specified in 40 CFR Part 136, Guidelines for Establishing Test Procedures for the Analysis for Pollutants.

12. Liquid Radioactive Discharge

All limitations and monitoring requirements for liquid radioactive waste discharges shall be regulated by the Nuclear Regulatory Commission in accordance with regulations as set forth in 10 CFR Part 20 and 10 CFR Part 50.

13. Post 316(a) Monitoring

The permittee has been granted a variance in accordance with Section 316(a) of the Clean Water Act and 9VAC25-260-90 of the Water Quality Standards. Effluent limitations for temperature more stringent than those in Part I.A.1 are not necessary to protect the Water Quality Standards of Lake Anna and the North Anna River.

In accordance with the original 316(a) study submittal, and the biological and temperature sampling conducted since then, the permittee shall continue to conduct temperature and biological monitoring of the Waste Heat Treatment Facility (WHTF), Lake Anna, and the North Anna River. The permittee shall submit to DEQ for approval, no later than March 31, 2008, a monitoring plan describing the sampling types, methods, locations, and frequencies for both physical-chemical and biological data. Any revisions to the approved plan shall be submitted to DEQ prior to implementation.

Temperature monitoring shall occur at a minimum of 11 stations; three in the WHTF, seven in Lake Anna, and one in the North Anna River. Fixed continuous temperature recorders shall be used at each location to record hourly temperature in degrees Celsius at a depth of one meter for all of the stations except at the station in Lake Anna closest to Dike 3 which shall be placed at a depth of three meters. Temperature recorders shall be field verified and calibrated annually. Biological monitoring shall include fish population surveys.

The permittee shall submit the results for the preceding year's monitoring by March 31 of each year. With the annual report of results, the permittee shall provide an analysis of the data and recommendations for changes to the study design as appropriate.

14. Use of Chemical Additives

- a. The use of chlorine or other biocide other than these identified in the current application, for any purpose other than disinfection at the sewage treatment plant, is prohibited without prior notification to DEQ, Northern Regional Office.
- b. At least thirty days prior to using any chemical additives not identified in the permit application, the permittee shall notify DEQ, Northern Regional Office, in writing, of the following:
 - (1) chemical additives to be employed and their purposes, and MSDS for each proposed additive;
 - (2) schedule of additive usage; and
 - (3) wastewater treatment and/or retention to be provided during the use of additives.
- c. Should the addition of treatment chemicals significantly alter the characteristics of the effluent, or if their usage becomes persistent or continuous, this permit may be modified or, alternatively, revoked and reissued to include appropriate limitations or conditions.

15. Discharge of Wastewater from Particle Separators

The permittee is authorized to discharge wastewaters generated by the operation of particle separators for supply wells 4 and 6 and the operation of the particle separator and sand filter for the supply well serving the North Anna Nuclear Information Center. Wastewater from these treatment units will be land applied in the vicinity of each of the supply wells. As a result of the nature of the wastewater, the permeability of the area soils and the substantial distance of travel to the nearest surface waters, no discharge to or impact

upon State waters is anticipated. There are no monitoring or reporting requirements for these discharges. Should the physical characteristics or volume of wastewater change substantially, the permittee shall notify the DEQ, Northern Regional Office in writing in advance of any such change in operaton.

16. 316(b) Requirements

As required by §316(b) of the Clean Water Act, the location, design, construction and capacity of the cooling water intake structures for the permitted facility shall reflect the best technology available (BTA) for minimizing adverse environmental impact. Within one year of the effective date of this permit the permittee shall submit biological data collected consistent with that described in the February, 2005 Proposal for Information Collection. This permit may be reopened to address compliance with Clean Water Act §316(b) through requirements including but not limited to those specified in EPA regulations in 40 CFR Part 125 Subpart J when finalized.

F. Storm Water Monitoring Requirements (Outfalls 014, 022, 023, 024, 025, 026)

1. General Storm Water Conditions

- a. Quarterly Visual Examination of Storm Water Quality. The permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall in Part I.A.7. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.
 - 1. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.
 - 2. Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
 - 3. If the facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the

permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

4. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

b. Allowable Nonstorm Water Discharges.

- 1. The following nonstorm water discharges are authorized by this permit provided the nonstorm water component of the discharge is in compliance with b.2., below:
 - (i) Discharges from fire fighting activities;
 - (ii) Fire hydrant flushings;
 - (iii) Potable water including water line flushings;
 - (iv) Uncontaminated air conditioning or compressor condensate;
 - (v) Irrigation drainage;
 - (vi) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
 - (vii) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
 - (viii) Routine external building wash down which does not use detergents;
 - (ix) Uncontaminated ground water or spring water;
 - (x) Foundation or footing drains where flows are not contaminated with process materials such as solvents;
 - (xi) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
- 2. Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:
 - (a) Identification of each allowable non-storm water source;
 - (b) The location where it is likely to be discharged; and
 - (c) Descriptions of appropriate BMPs for each source.
- 3. If mist blown from cooling towers is included as one of the allowable non-storm water discharges, the facility must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower. The permittee must determine that the levels of such chemicals in the discharges will not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs selected to control such discharges.
- c. <u>Releases of Hazardous Substances or Oil in Excess of Reportable Quantities.</u> The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or

minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110 (1998), 40 CFR 117 (1998) or 40 CFR 302 (1998) occurs during a 24 hour period, the permittee is required to notify the Department in accordance with the requirements of Part II G as soon as he or she has knowledge of the discharge. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110 (1998), 40 CFR 117 (1998) and 40 CFR 302 (1998) or § 62.1-44.34:19 of the Code of Virginia.

2. Facility-Specific Storm Water Management Conditions

In addition to the requirements of Part I.F.3.d., the Storm Water Pollution Prevention Plan shall include, at a minimum, the following items.

a. <u>Description of Potential Pollutant Sources.</u>

Drainage. A site map which clearly outlines the locations of the following, as they apply to the facility: processing areas and buildings; treatment ponds; location of short and long term storage of general materials (including but not limited to: supplies, construction materials, plant equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizers, and pesticides); landfills; location of construction sites; and locations of stock pile areas (such as coal piles and limestone piles).

b. Measures and Controls.

- (1) Good Housekeeping. The following areas must be specifically addressed.
 - (a) Fugitive Dust Emissions. The plan must describe measures that prevent or minimize fugitive dust emissions from coal handling areas. The permittee shall consider establishing procedures to minimize offsite tracking of coal dust. To prevent offsite tracking the facility may consider specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.
 - (b) Delivery Vehicles. The plan must describe measures that prevent or minimize contamination of storm water runoff from delivery vehicles arriving on the plant site. At a minimum the permittee should consider the following: i) Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and ii) Develop procedures to deal with leakage or spillage from vehicles or containers, and ensure that proper protective measures are available for personnel and environment.
 - (c) Fuel Oil Unloading Areas. The plan must describe measures that prevent or minimize contamination of storm water runoff from fuel oil unloading areas. At a minimum the permittee must consider using the following measures, or an equivalent: i) Use containment curbs in unloading areas; ii) During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up; and iii) Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath fuel oil connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors).

- (d) Chemical Loading/Unloading Areas. The plan must describe measures that prevent or minimize the contamination of storm water runoff from chemical loading/unloading areas. Where practicable, chemical loading/unloading areas should be covered, and chemicals should be stored indoors. At a minimum the permittee must consider using the following measures or an equivalent: i) Use containment curbs at chemical loading/unloading areas to contain spills; and ii) During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up.
- (e) Miscellaneous Loading/Unloading Areas. The plan must describe measures that prevent or minimizes the contamination of storm water runoff from loading and unloading areas. The plan may consider covering the loading area, minimizing storm water runon to the loading area by grading, berming, or curbing the area around the loading area to direct storm water away from the area, or locate the loading/unloading equipment and vehicles so that leaks can be contained in existing containment and flow diversion systems.
- (f) Liquid Storage Tanks. The plan must describe measures that prevent or minimize contamination of storm water runoff from above ground liquid storage tanks. At a minimum the permittee must consider employing the following measures or an equivalent: i) Use protective guards around tanks; ii) Use containment curbs; iii) Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors); and iv) Use dry cleanup methods.
- (g) Large Bulk Fuel Storage Tanks. The plan must describe measures that prevent or minimize contamination of storm water runoff from liquid storage tanks. At a minimum the permittee must consider employing the following measures, or an equivalent: i) Comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC); and ii) Containment berms.
- (h) The plan must describe measures to reduce the potential for an oil spill, or a chemical spill, or reference the appropriate section of their SPCC plan. At a minimum the structural integrity of all above ground tanks, pipelines, pumps and other related equipment shall be visually inspected on a weekly basis. All repairs deemed necessary based on the findings of the inspections shall be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.
- (i) Oil Bearing Equipment in Switchyards. The plan must describe measures to reduce the potential for storm water contamination from oil bearing equipment in switchyard areas. The permittee may consider level grades and gravel surfaces to retard flows and limit the spread of spills; collection of storm water runoff in perimeter ditches.
- (j) Residue Hauling Vehicles. All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds must be repaired as soon as practicable.
- (k) Ash Loading Areas. Plant procedures shall be established to reduce and/or control the tracking of ash or residue from ash loading areas for example, where practicable, requirements to clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water.
- (l) Areas Adjacent to Disposal Ponds or Landfills. The plan must describe measures that prevent or minimize contamination of storm water runoff from areas

- adjacent to disposal ponds or landfills. The permittee must develop procedures to: i) Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles; and ii) Reduce ash residue on exit roads leading into and out of residue handling areas.
- (m) Landfills, Scrapyards, Surface Impoundments, Open Dumps, General Refuse Sites. The plan must address landfills, scrapyards, surface impoundments, open dumps and general refuse sites.
- Maintenance Activities. For vehicle maintenance activities performed on the (n) plant site, the permittee shall use the following BMPs where applicable: (i) Vehicle and Equipment Storage Areas. The storage of vehicles and equipment awaiting maintenance with actual or potential fluid leaks must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The permittee shall consider the use of drip pans under vehicles and equipment, indoor storage of the vehicles and equipment, installation of berming and diking of this area, use of absorbents, roofing or covering storage areas, cleaning pavement surface to remove oil and grease, or other equivalent methods; (ii) Fueling Areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from fueling areas. The permittee shall consider covering the fueling area, using spill and overflow protection and cleanup equipment, minimizing runon/runoff of storm water to the fueling area, using dry cleanup methods, collecting the storm water runoff and providing treatment or recycling, or other equivalent measures; (iii) Material Storage Areas. Storage units of all materials (e.g., used oil, used oil filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids) must be maintained in good condition, so as to prevent contamination of storm water, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The permittee shall consider indoor storage of the materials, installation of berming and diking of the area, minimizing runon/runoff of storm water to the areas, using dry cleanup methods, collecting the storm water runoff and providing treatment, or other equivalent methods; (iv) Vehicle and Equipment Cleaning Areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment cleaning. The permittee shall consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all washwaters drain to the intended collection system (i.e., not the storm water drainage system unless VPDES permitted), collecting the storm water runoff from the cleaning area and providing treatment or recycling, or other equivalent measures. The discharge of vehicle and equipment wash waters, including tank cleaning operations, are not covered under this section; and (v) Vehicle and Equipment Maintenance Areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance. The permittee shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean up practices where the practices would result in the discharge of pollutants to storm water drainage systems, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, minimizing runon/runoff of storm water areas or other equivalent measures.

- (o) Material Storage Areas. The plan must describe measures that prevent or minimize contamination of storm water from material storage areas (including areas used for temporary storage of miscellaneous products, and construction materials stored in lay down areas). The permittee may consider flat yard grades, runoff collection in graded swales or ditches, erosion protection measures at steep outfall sites (e.g., concrete chutes, riprap, stilling basins), covering lay down areas, storing the materials indoors, covering the material with a temporary covering made of polyethylene, polyurethane, polypropylene, or hypalon. Storm water runon may be minimized by constructing an enclosure or building a berm around the area.
- (2) Inspections. Qualified facility personnel shall be identified to inspect the following areas: loading/unloading areas, switchyards, fueling areas, bulk storage areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.
- (3) Employee Training. Training should address topics such as goals of the pollution prevention plan, spill prevention and control, proper handling procedures for hazardous wastes, good housekeeping and material management practices, and storm water sampling techniques. The pollution prevention plan shall identify periodic dates for such training, but in all cases training must be held at least annually.

3. Storm Water Pollution Prevention Plan Requirements

A storm water pollution prevention plan was required to be developed and implemented for the facility by the previous permit. The existing storm water pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this section. The plan shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part I.F.3.d. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation 4 VAC 50-30-10 et seq. All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit.

a. Deadlines for Plan Preparation and Compliance

1. The existing storm water pollution prevention plan shall be reviewed and modified, as needed by December 31, 2007, and implemented as expeditiously as practicable. Verification of compliance with the above deadline shall be provided by February 1, 2008.

2. Measures That Require Construction. In cases where construction is necessary to implement measures required by the modified plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. <u>Signature and Plan Review</u>

- 1. Signature/Location. The plan shall be signed in accordance with Part II.K., and be retained onsite at the facility that generates the storm water discharge in accordance with Part II.B.2.
- 2. Availability. The permittee shall make the storm water pollution prevention plan, annual site compliance inspection report, or other information available to the Department upon request.
- 3. Required Modifications. DEQ may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this permit. Such notification shall identify those provisions of the permit that are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this permit. Within 60 days of such notification from the DEQ, the permittee shall make the required changes to the plan and shall submit to DEQ a written certification that the requested changes have been made.

c. Keeping Plans Current

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to surface waters or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under section d. below of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. New owners shall review the existing plan and make appropriate changes. Amendments to the plan may be reviewed by DEQ in the same manner as noted in section b. above.

d. Contents of the Plan

The contents of the pollution prevention plan shall comply with the requirements listed below and those in Part I.F.2. (Facility-Specific Storm Water Management Conditions.) of this permit These requirements are cumulative. The following requirements are applicable to all storm water pollution preventions plans developed under this permit. The plan shall include, at a minimum, the following items.

1. Pollution Prevention Team. The plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities

and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

- 2. Description of Potential Pollutant Sources. The plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials that may potentially be significant pollutant sources. The plan shall include, at a minimum:
 - Drainage. A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under section 2.(c). below have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes and wastewaters, locations used for the treatment. filtration, or storage of water supplies, liquid storage tanks, processing areas, and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified;
 - (b) Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of submission of the application for this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the submission of the application for this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives;
 - (c) Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility within the 3 year period immediately prior to the date of submission of the application for this permit. Such list shall be updated as appropriate during the term of the permit;
 - (d) Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit; and

- (e) Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices, and wastewater treatment activities to include sludge drying, storage, application or disposal activities. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, total suspended solids, etc.) of concern shall be identified.
- 3. Measures and Controls. The permittee shall develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls.
 - (a) Good Housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm water discharges. The plan shall describe procedures performed to minimize contact of materials with storm water runoff. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, material handling areas, and loading/unloading areas.
 - (b) Preventive Maintenance. A preventive maintenance program shall involve: timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins); inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures which could result in discharges of pollutants to surface waters; and appropriate maintenance of such equipment and systems.
 - (c) Spill Prevention and Response Procedures. Areas where potential spills can occur that can contribute pollutants to storm water discharges, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.
 - (d) Inspections. Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the pollution prevention plan.

- (e) Employee Training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.
- (f) Recordkeeping and Internal Reporting Procedures. A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
- (g) Sediment and Erosion Control. The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.
- (h) Management of Runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide for the implementation and maintenance of measures that the permittee determines to be reasonable and appropriate. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices; reuse of collected storm water (such as for a process or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices, wet detention/retention devices; or other equivalent measures.
- 4. Comprehensive Site Compliance Evaluation. Qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall include the following:
 - (a) Areas contributing to a storm water discharge associated with industrial activity such as material storage, handling, and disposal activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made;

- (b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with section d.(2) above and pollution prevention measures and controls identified in the plan in accordance with d.(3) above shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation;
- (c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with section (4)(b) shall be made and retained as part of the storm water pollution prevention plan for at least 3 years from the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part II.K; and
- (d) Where compliance evaluation schedules overlap with inspections required under section d.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

e. Special Pollution Prevention Plan Requirements

In addition to the minimum standards listed in section d. above and Part I.F.2. (Facility-Specific Storm Water Management Conditions) of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines.

- 1. Additional Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Requirements. In addition to the requirements of sections d.1(1) through d.(4) above, Part I.F.2. (Facility-Specific Storm Water Management Conditions) of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under EPCRA Section 313, prior to May 1, 1997, for chemicals that are classified as Section 313 water priority chemicals, except as provided in section e.(2)(b)ii. below, and where there is the potential for these chemicals to mix with storm water discharges, shall describe and ensure the implementation of practices that are necessary to provide for conformance with the following guidelines.
 - (a) In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided unless otherwise exempted under e.(2)(c) below. At a minimum, one of the following preventive systems or its equivalent shall be used:
 - (i) Curbing, culverting, gutters, sewers, or other forms of drainage control to prevent or minimize the potential for storm water run on to come into contact with significant sources of pollutants; or
 - (ii) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind.

- (b) In addition to the minimum standards listed under section e.(2) above, and except as otherwise exempted under section e.(2)(c) below, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with other effective storm water pollution prevention procedures, and applicable state rules, regulations, and guidelines.
 - (i) Liquid Storage Areas Where Storm Water Comes Into Contact With Any Equipment, Tank, Container, or Other Vessel Used for Section 313 Water Priority Chemicals.
 - -- No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.
 - -- Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.
 - (ii) Material Storage Areas for Section 313 Water Priority Chemicals Other Than Liquids. Material storage areas for Section 313 water priority chemicals other than liquids that are subject to runoff, leaching, or wind shall incorporate drainage or other control features that will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with those chemicals.
 - (iii) Truck and Rail Car Loading and Unloading Areas for Liquid Section 313 Water Priority Chemicals. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of those chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.
 - (iv) Areas Where Section 313 Water Priority Chemicals Are Transferred, Processed, or Otherwise Handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

- (v) Discharges From Areas Covered by Paragraphs (i), (ii), (iii), or (iv)
 - -- Drainage from areas covered by paragraphs (i), (ii), (iii), or (iv) of this section should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.
 - -- Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.
 - -- If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.
 - -- Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.
- (vi) Facility Site Runoff Other Than From Areas Covered By paragraphs (i), (ii), (iii), or (iv). Other areas of the facility (those not addressed in paragraphs ((i), (ii), (iii), or (iv)), from which runoff that may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.
- Preventive Maintenance and Housekeeping. All areas of the facility (vii) shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures that could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered that may result in significant releases of Section 313 water priority chemicals to waters of the United States, action to stop the leak or otherwise prevent the significant release of Section 313 water priority chemicals to waters of the United States shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.
- (viii) Facility Security. Facilities shall have the necessary security systems to prevent accidental or intentional entry that could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

- Training. Facility employees and contractor personnel that work in areas (ix) where Section 313 water priority chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year. Training shall address pollution control laws and regulations, the storm water pollution prevention plan and the particular features of the facility and its operation that are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of those chemicals can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.
- (c) Facilities subject to reporting requirements under EPCRA Section 313 for chemicals that are classified as Section 313 water priority chemicals that are handled and stored onsite only in gaseous or nonsoluble liquid or solid (at atmospheric pressure and temperature) forms may provide a certification as such in the pollution prevention plan in lieu of the additional requirements in section e.(2) above. Such certification shall include a narrative description of all water priority chemicals and the form in which they are handled and stored, and shall be signed in accordance with Part II.K.
- (d) The storm water pollution prevention plan shall be certified in accordance with Part II.K.
- 2. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and that generate a storm water discharge associated with industrial activity that is discharged to surface waters shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Permittees shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than 3 years after the effective date of this permit. Permittees with previous coverage under a VPDES permit that included this requirement shall be compliant with this provision upon submittal of the permit application. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

- 1. Records of monitoring information shall include:
 - a. Records of monitoring information shall include:
 - b. The date, exact place, and time of sampling or measurements;
 - c. The individual(s) who performed the sampling or measurements;
 - d. The date(s) and time(s) analyses were performed;
 - e. The individual(s) who performed the analyses;
 - f. The analytical techniques or methods used; and
 - g. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Department of Environmental Quality - Northern Regional Office (DEQ-NRO) 13901 Crown Court Woodbridge, VA 22193

Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

2. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.

3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from this discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F.; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F., shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II, I.1.or I.2., in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.1.2.

NOTE: The immediate (within 24 hours) reports required in Parts II, G., H. and I. may be made to the Department's Northern Virginia Regional Office at (703) 583-3800 (voice) or (703) 583-3841 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - 1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - 2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

- 1. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - 1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - 2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:
 - 1) The chief executive officer of the agency, or
 - 2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

- 2. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II.K.1.;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II.K.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2. shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II, K.1. or K.2. shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U.), and "upset" (Part II.V.) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II, U.2, and U.3.

2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - 1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3) The permittee submitted notices as required under Part II.U.2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2. are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II.I.; and
 - d. The permittee complied with any remedial measures required under Part II.S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

- 1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2., a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II.Y.1., this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.